

Section I: General Information

Project Title: Taking Resources and Information Online (TRIO)

PublicLibrary/Public School Libraries: Automation/Access Project

City of Humboldt Public Library

Humboldt/Table Rock-Steinauer Public School Libraries

K-4and 9-12 Library@ Humboldt Attendance Center

5/6/7/8th Grade Library@ Table Rock Attendance Center

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Total Funds Requested: \$18,600

Section II: Executive Summary (Required)

Provide a one or two paragraph summary of the proposed project. This summary will be used in other externally distributed documents and should therefore clearly and succinctly describe the project and the information technology required.

The Bruun Memorial Public Library of Humboldt, the Humboldt Public School Library-Media Center, and the Table Rock-Steinauer School Library-Media Center have formed a consortium, TRIO (Taking Resources & Information Online), to simultaneously and collaboratively enhance access to library services. This TRIO of sites (three libraries representing three communities--Humboldt, Table Rock, and Steinauer) will serve a TRIO of customer groups:

Students;

Teachers; and

Patrons/Public

The Taking Resources & Information Online project will also enable a TRIO of activities for the three entities: the purchase and installation of adequate servers, the upgrade or conversion of library automation software, and the development of beneficial new networks of information. Library doors leading to local materials and valuable information resources will be opened virtually 24 -hours-a-day, seven-days-a-week, through TRIO's plans to provide enhanced access via the Internet. TRIO is requesting \$18,600 from the Community Council of the Nebraska Information Technology Commission to assist this technology improvement project that will benefit southeastern Nebraska citizens.

Section III: Goals and Objectives (Required)

1. Describe the project, including specific goals and objectives.

The Taking Resources & Information Online (TRIO) project has developed several goals and related objectives to anchor the consortium in its efforts and to provide measurable standards for progress in their missions as learning and educational centers for their respective communities.

Goal 1 To provide enhanced library services

Objective 1.1 Provide online access to library card catalogs of the three consortium libraries and other information resources

Objective 1.2 Provide training for library patrons and students to increase their information literacy skills

Objective 1.3 Use technology to help efficiency, control costs, and meet the needs of the public and/or students

Goal 2 To provide support and assistance to the staff of the schools and libraries in their roles as information mediators

Objective 2.1 Provide technology infrastructure that assists their staff productivity

Objective 2.2 Provide adequate technology support to ensure efficiency in staff efforts

Objective 2.3 Provide informal social support to all staff through shared experiences and collaboration

The TRIO project will bring advances in technology to the consortium libraries, making the card catalogs of multi-type (public and school) libraries available online through the Internet, as well as intraschool, through each school's local area network (LAN). Currently, automated library systems have been established at each consortium member site, but these need significant enhancements.

Please refer to the comparison chart in appendix to review the current situation and proposed solution.

2. Describe the project's relationship to the entity's comprehensive technology plan.

Each of the three participating members of the consortium has a comprehensive technology plan in place. In addition, the consortium itself has developed technology strategies related to the TRIO project's goals and objectives:

Bring enhanced access to the consortium members/ libraries

Link the schools' library-media centers with the local public library and other community and state agencies for expanded learning opportunities

Provide a user-friendly, consistent interface for online catalogs, providing ease of use for students and community members

Encourage social support and training for staff involved in technology innovations

Ensure efficient systems management through the use of a coordinated software vendor, hardware vendor, and a common tech support provider among all three consortium members

Arrange efficient training formats in the effective use of the online resources for public and students

Serve as a model of collaboration in library automation and web access for southeast Nebraska

Bruun Memorial Library's comprehensive technology plan provides the direction for many project objectives, along with similar intents in each school's technology document (available at <http://scrtec-ne.unl.edu/usf/submission.html>). The Bruun Library's strategic technology objectives and their correlation with TRIO objectives are as follows:

- A. Use technology to provide information delivery (TRIO Obj. 1.1)
- B. Use technology to control cost and improve efficiency of library operations (TRIO Obj. 1.3, 2.2)
- C. Maintain flexibility to adapt new and changing technology to meet the public's needs (TRIO Obj. 1.3, Obj. 2.1,)
- D. Use technology to connect to relevant sources outside the library (TRIO Obj. 1.1, 1.3)
- E. Train staff and educate the public on how to use technology to retrieve needed information (TRIO Obj. 1.2, Obj. 2.3)

In addition, both schools' strategic school improvement plans specifically provide for integration of technology into the local curricula. The TRIO project will greatly benefit those strategic action plans by vastly increasing the opportunities for students to use online electronic resources from their classroom computers, computer lab workstations, the public library, or their own homes.

Of particular importance to the two schools in this consortium is the amplification that the TRIO project would have upon efforts to meet the *Nebraska LEARNS Standards* (particularly Language Arts 1.4.1, 8.1.2, and 12.1.2, concerning student skills in locating, accessing and evaluating resources). The project will also bolster the accomplishment of *Student Essential Learnings in Technology* and the *NE Educator Technology Competencies* (as documented in the guidelines developed by the Nebraska Department of Education).

3. Describe the project's objectives and how they support the goals of the NITC and the priorities of the Community Council.

The TRIO project meets the following goals and priorities of NITC:

Support the development of a unified statewide telecommunications infrastructure that is scalable, reliable and efficient as to:

Improve government efficiency and effectiveness;

Currently, each consortium member has undertaken library automation. By moving to automated systems, technology is used to save time and increase information access. By automating tasks of circulation, manual tasks have been replaced with time-saving technology that result in greater staff efficiency. Data and statistics are also derived more easily from an automated system, providing necessary background information for making wise decisions with taxpayer supported funds. By automating the catalog and making it available online, a library without walls can be developed, supporting a wide variety of rapid, user-friendly searching capabilities.

By simultaneously installing a common interface at all three locations of the TRIO consortium, an important efficiency for users is provided. Learning how to access the system at one location provides an immediate familiarity with the other two locations.

Expand citizen access to government information;

Each member of the consortium is committed to including links to information that assists citizens in accessing state, local, and federal government websites for information available on the Internet. Links to other information sources, such as selected FirstSearch databases, Books In Print, INET Library, Kiplinger Business Forecasts, H. W. Wilson OmniFile & Biographies Plus will be available from the libraries websites through the TRIO project. Currently, these excellent resources are often used only sporadically because no dynamic web page exists to make easy linking for the users. Training, both at the schools, and at the public library, will facilitate student/citizen use of these links.

Broaden educational opportunities to include expanded access to lifelong educational and training opportunities so that Nebraska's citizens and work force can prosper in the emerging information society;

Libraries are community and school nerve centers. They provide a forum through which the community interacts, both through the use of facilities, and through the distribution of information. As the front lines in the advancement of literacy, they offer programs, services, and collections that support lifelong learning and advance key skills needed for a successful future in the 21st Century.

The TRIO project will permit information retrieval on holdings cataloged at any of the consortium libraries collections through any location that has access to the Internet.

Humboldt Public Schools hosts a distance education laboratory which makes possible classes at the secondary level, college courses, graduate-level classes, and also training of interest to the community. Providing an appropriate interface to ascertain availability of desired items in the local libraries and/or to request an interlibrary loan of a specified resource will bolster the lifelong learning opportunities afforded through this distance learning laboratory and throughout the community.

Enhance services to Nebraska communities and citizens.

Links to information regarding community resources such as local area events, public meeting announcements, and school board agendas would also be likely information on the TRIO libraries websites.

Coordinate the state's investment in telecommunications infrastructure so as to:
Develop new ways to aggregate demand, reduce costs, and create support networks;

This project joins a public library and two school library-media centers in a web-based catalog and automation enhancement, reducing costs for each library, through an aggregated demand. The shared and simultaneous implementation planned through the TRIO project will simplify many ongoing issues of technology innovation.

By joining in this library enhancement together, similar technology infrastructure will result in a more cohesive support system (all librarians addressing the same problems). A natural reliance on each other will most likely develop among the three key librarians, and will lead to an exchange of insight and information that will help maintain project progress. Email and other technology will assist this support network.

It is also probable that costs will be reduced in this simultaneous implementation (for example, routine maintenance or upgrades could be delivered to all entities at the same time, so one visit is scheduled, rather than three separate visits each with their own travel expenses). Additionally, some sharing of resources is expected to occur, as the librarians become more familiar with the holdings of each site.

Encourage collaboration between communities of interest;

Collaboration is at the heart of this project joining both school and public libraries, and two communities. Cooperation between the entities has been in place for decades through the sharing of resources by interlibrary loan. During the past few years, the Humboldt School and Public Library personnel have worked together on school and library committees, and have been partners in Technology Challenge Fund grants.

For the past two years, successful coordination has existed among the two schools, as they developed a cooperative sport program and shared teachers. Currently, the schools are finalizing plans to unify into one district on June 1, 2001. This unification will require many extended collaborative efforts, as staff and students combine. Three boards of education will oversee the unification---one from each school to govern building related issues, and a unified board to conduct the general fund activities of the new unified district.

Opportunities for even more expansion is likely, as small schools and rural communities struggle in the world of digital divide and declining populations. As an example, conversations have begun on ways to bring the even smaller Table Rock Public Library into this consortium in the future.

Encourage competition among technology and service providers.

Vendors view consortium projects as attractive entities for their service, since the consortium projects are inherently larger and more profitable than unrelated efforts by small entities. By joining as a trio to simultaneously purchase hardware and software, more competitive pricing is feasible.

Currently, there is little opportunity in this area for seeking competitive telecommunications rates. Great obstacles to connectivity have been noted during the planning efforts of the TRIO consortium for this project. No doubt our area is representative of the digital divide," where the financial consideration of access to T-1 or better telecommunications remains unrealistic for many small libraries or schools.

Determine a broad strategy and objectives for developing and sustaining information technology development in Nebraska, including long-range funding strategies so as to:

Stimulate and support information-based economic development;

Availability of appropriate connectivity is an issue for small rural locations such as Humboldt, Table Rock, and Steinauer. The strength of a school can often be a critical facet in the decisions of telecommunication providers to invest infrastructure in a community. With such investments, economic development is stimulated.

The fiber connectivity that is closely available to these small towns was promulgated primarily through the interest in distance education possibilities. The distance learning laboratory at the Humboldt Public School provides increased opportunities for continued upgrades (for

example, this April the school is set to increase from 10 megs to 100 megs, through the distance learning consortium efforts).

It is planned , that with the unification of the two school districts, that distance learning opportunities will be phased into the Table Rock school location. Grant funding is already being researched to assist with this enhancement.

Encourage the appropriate use of information technology in education, health care, and economic development, and every level of government service;

The libraries provide an avenue for the professional selection of quality literature and other resources for citizen and student use. Each school has appropriate use policies and also emphasizes procedures to avoid copyright infringement.

Technology committees of both schools work in an ongoing way to oversee many issues of technology use in education. These committee members, and all school faculty, are charged with increasing their understanding and skills in technology--learning to use information technology appropriately. Frequently, opportunities to expand technology knowledge are made available through professional development activities available to the faculty, both within the school itself through district and grant-funded trainings, and through Educational Service Unit workshops or other outside organizational settings. Public librarians have often been invited to attend these workshops.

Encourage and enable long-term infrastructure innovation and improvement;

This project is an innovative project, bringing new opportunities to a rural, and in telecommunications infrastructure, somewhat remote area. While there are web-enabled automated catalogs available for many of the larger urban areas or the larger academic libraries, it is still not typical situation for small libraries.

To include this favorable access among all our libraries simultaneously will improve the long-term results of the project, as the patrons and student users can be trained concurrently--in effect activating interest across many generations of users at once. Students, moms and dads, grandmas and grandpas--all will be stepping into the digital age hand-in-hand through the TRIO project.

Community Council Priorities:

Nebraska will cultivate an economic, political, and regulatory environment conducive to IT development by:

Ensuring access to public and private services for all citizens of the State of Nebraska (regardless of impediment, i.e., location and socio-economic status) through the appropriate and efficient use of information technology.

The information technology and enhanced access proposed in this TRIO project is an especially appropriate way to address needs of disabled, homebound, or medically challenged students and patrons of the libraries. While efforts have been made by each entity to address the needs of such citizens in the physical facilities of each library, online searching and resources add an especially convenient and efficient way to assist with such concerns.

The small towns that serve as the client base for the libraries have large demographic population percentages of persons over age 65. Often, when severe winter weather makes

walking treacherous, these clients forego trips outside their homes. Many of this population request meals on wheels,” which are delivered through volunteer efforts of local organizations. Once the public becomes aware of the convenience of online library transactions, it is highly likely that the delivery of books could be added to meals on wheels services with nominal efforts or costs.

Funding the most appropriate and efficient use of information technology is a significant concern for all schools. The benefits and costs of particular improvements, as well as the future of technology, is often somewhat anecdotal or unclear. With the joining of two schools of long-standing traditions and proud alumni, decisions must be especially considered with care. The policymakers and administration of these two soon-to-be-unified school districts have a particular interest in working toward equity in information technology access for both attendance centers; they also feel significant pressure to restrain costs and provide efficient services. All decisions will be made with wise consideration toward meeting the needs of all students while seeking to protect the pocketbooks of the taxpayers who must bear the burdens of financial choices.

While this model is intended to serve primarily the patrons in our southeast portion of the state, all Nebraskans and people around the world, regardless of their location and socio-economic status, will have access to the online resources and catalogs of consortium members/libraries through the Internet, regardless of the staffing hours of the libraries.

While one intention of this project is to assist a wider array of patrons with access to online resources and catalogs through the members/libraries on their home computers, the schools and libraries themselves offer the most likely opportunities in our communities for connecting to the Internet for those who do not yet have that capability. As a case in point for the difficulties of access in a rural community, a survey of the area notes that Bruun Memorial Library is the only public access point for the Internet within the community of Humboldt.

Promoting the development of an infrastructure (including sufficient bandwidth) that is secure, affordable, reliable, and responsive to the specific needs of various sectors. Efforts should be made to ensure that systems across the state are compatible.

The efforts of the TRIO project will promote the development of infrastructure by enjoining the need for improved lines of connectivity, especially for the Humboldt Public Library which will move from a dial-up connection to a T-1 line. The Table Rock school site will also likely lead to further infrastructure expansion as the need for more bandwidth might be precipitated by heavy use of the online catalog and web server, as well as through the possibilities for installation of distance education equipment. Interest in improving this connection has been established, but supplemental funding to assist with expenses has not yet been awarded.

Facilitating IT development and innovation by raising awareness, sharing information, encouraging collaboration, and developing partnerships among public and private entities.

The Taking Resources & Information Online (TRIO) effort will epitomize all of these activities through its awareness campaign, its plan for sharing of information, and its innate collaboration and partnerships.

While the IT knowledge of the small rural communities is not typically high, the public library and the public schools provide two diverse centers for outreach that can communicate awareness issues with extreme ease to the public. Local and school newspapers, school websites, and Alumni-Foundation newsletters offer visual and multimedia opportunities for communication of information technology innovations. Face-to-face opportunities through such formal means as parent-teacher conferences, along with informal person-to-person contact at the schools and libraries will round out the possibilities to extend knowledge. We also have no doubt that the youth of our communities will be especially likely conduits of information.

Section IV: Scope and Objectives

Describe the project's specific scope and objectives. The narrative should address the following:

1. The beneficiaries of this demonstration project will include:

The Taking Resources & Information (TRIO) project is intended to assist a consortium of three small, multi-type libraries (two schools and a public library) in providing enhanced access to information. By adding and/or upgrading hardware and software, increasing network capabilities, and providing online access to all three entities, students and patrons will maximize their use of the consortium libraries and connect to useful, appropriate information resources.

The primary beneficiaries of the TRIO project will be the students and townspeople from the areas served by the schools of Humboldt and Table-Rock Steinauer and their respective communities. Local users will be able to access each library consortium member's catalog, as well as the catalogs and unique resources available in the other libraries. Additionally, users anywhere in the world could conceivably also use the Internet to connect to the library catalogs.

Interlibrary Loan, already available to each site, will allow these resources to be further shared. Other possibilities for more collaboration exist, as greater awareness of each library's holdings become apparent during the project coordination.

For the consortium libraries of the TRIO project, critical improvements of service are the most important need. Information resources must be adapted and developed that will permit a wider accessibility to the users of the libraries. Currently, patron access to the library catalog is limited.

Technology resources represent both the need and the solution to the issues of improvement. Two consortium members currently have automation systems that are DOS-based, and one has a Macintosh-based system. It would be productive for all to migrate simultaneously to a Windows NT server environment as a prudent next step in improving access. Windows NT is a well accepted technology, and establishing Windows NT servers that are robust and also capable of web hosting would be relevant in future plans of the consortium to host their own web catalog collections.

Additionally, the Windows NT environment would ease support issues for these rural entities as it would facilitate the observation and adjustment of the servers from a remote location. For example, Mike Goff, Director of Technical Services for Educational Service Units 4, 5, 6 could remotely adjust the two school servers from his base in Milford.

For the steps being envisioned through this grant, installing the three Windows NT servers (one at each site) provides a solution with a standard of interoperability that should reduce management concerns and management costs, as staff at all three entities can troubleshoot problems collectively.

2. Expected Outcomes of the project:

The TRIO project will upgrade the hardware at each site to a current standard of acceptance.

Upgrades or conversions to current editions of a common, well-established cataloging and circulation software will provide for improved performance, and allow for future possibilities to combine the consortium collections into a union database, if that option later becomes appropriate.

Unlimited network licensing will extend the use of library automation cataloging to all capable computers within each building, a significant improvement over the current status.

A solution for making the card catalogs of each library and links to other resources available to any computer with Internet access will also be made available through the funds awarded by this grant. Initially, this access is planned to be through an outside library catalog web hosting service, with future plans to host the catalogs through the Windows NT server installed at each consortium site.

Remote access of the holdings of each consortium members/ catalog will assist wise utilization of limited financial resources, as fewer duplicate titles will be needed, and items may be borrowed from each other's collections. The convenience and educational value of remotely accessing the holdings of each library will particularly help several elementary grades at Humboldt school currently using the *Accelerated Reader* program. It will be extremely advantageous for students to be able to match available books in both the schools and public libraries with the purchased quizzes from the program.

The Bruun Memorial Public Library in Humboldt also has an extensive local history and community genealogy collection that may especially appeal to alumni living a distance from their hometown. The Internet search capabilities will open up this possibility, that would be nearly unachievable without these technology resources.

3. Measurements and assessment methods that will verify project outcomes:

The measurement and assessment for the Taking Resources & Information Online (TRIO) project will include both formative and summative measures.

The analysis of the success of the project will be based on improvement of services provided by the consortium libraries. Formative measures will include the use of email links at each library's website to provide users opportunity to input their reactions to the enhanced services of the project, so that adjustments may facilitate improvement in an ongoing fashion. The key leaders of the TRIO project will also assist Bruun Memorial Library in making available a written comment form for library patrons to enable community assessment of the project's services.

Staff and students (of at least three selected grade levels) will be surveyed by project-developed pre- and post-implementation questionnaires concerning their use of the library catalog resources to ascertain growth in accessibility to resources.

Tracking of the borrowing and lending of materials through Inter library Loan statistics compiled by the Nebraska Library Commission will serve as an additional measure for

comparison of the Bruun Memorial Public Library's activities pre- and post-implementation of the TRIO project.

Attainment charts for each library, and the consortium as a whole, will be developed by the project leaders to confirm that all hardware and software installations, project objectives, and grant requirements are met in a timely fashion.

4. Significant constraints of the project (Constraints are factors that will limit the project management team's options.);

By using accepted technology (*Windows NT*) and widely-used commercial software for library automation (*Follett Catalog Plus and Circulation Plus*), few constraints in technology are expected.

While the time to learn and implement new technologies is often a constraint on human resources during innovative projects, the provision for support afforded by the three concurrent installations and the collaboration of the project members will alleviate much of this difficulty.

The solution for outside web hosting (through LibraryCom) was not the first choice for the consortium; pricing for telecommunications proved to be too significant of barrier to provide the hosting of our own web catalogs through the proprietary solution of our preference. By choosing LibraryCom as the outside web hosting solution, real-time catalog searching will not be practical. This solution is seen as a cost-effective, phase one adaptation, in that it will provide a close moorer of our catalog, albeit not as dynamic as we would wish. We expect to seek additional funding and connectivity improvements within the next year to fully accomplish our vision for full implementation.

5. Significant assumptions relating to the project (Assumptions are factors that, for planning purposes, will be considered to be true.)

Technology is constantly changing, but current need offsets waiting for better technology improvements in the future

Students and patrons will have interest in learning to use the computer catalogs through the networked availability within the confines of the school or library sites

There is increasing interest in remote access to information and services from the Internet Library funding, including erate assistance, will remain stable, or improve.

The solution of an outside web hosting will prove acceptable for the current needs of the consortium

The libraries staff members currently have enough information technology skills to adapt to the new technologies

Work flow processes within the library will allow sufficient time for the librarians to proceed on learning and using new technologies

The connectivity established at each site will allow for satisfactory implementation of the technology to be purchased or used

Section V: Project Justification (Business Case)

Justify the project either in terms of an economic return on investment or other benefits to the entity or the public. The narrative should address the following:

1. Cost/benefit analysis and a life cycle cost analysis;

COST/BENEFIT/Life Cycle: Faced with limited financial resources, the three library sites (particularly the City of Humboldt Library) had to be very cautious about getting into an option that was beyond their ability to sustain after the grant period had ended. The LibraryCom solution to posting holdings to the web was the financially driven compromise that lets all entities balance the cost with the benefit.

Head City Librarian Jorene Herr feels that this LibraryCom approach will allow the City to provide a remote opportunity to review library holdings in a low cost manner and allow the libraries to gauge the level of use. Ms. Herr feels this low cost step into new service is a perfect fit, rather than saddling the libraries with an ongoing operating cost, before they know how well accepted this new service will be.

Annual fees of \$900 for each consortium member will be paid to LibraryCom for hosting the web catalogs for each library and assisting with technology support and importing of files. This solution will be reviewed each year, and beyond year one, each member will decide independently whether to continue with this alternative or seek an upgraded solution or elect to provide services to library customers in a different format.

The hardware should life cycle every four to five years. Schools will most likely use district funding or grant opportunities to fund needed hardware replacements. The public library will expect to replace the server beyond year five through a combination of the following: contributions, fundraising efforts and support from the Friends of the Library, grant awards, and/or City of Humboldt funds.

A software maintenance agreement and tech support plan with the library automation vendor will be in place for each library, permitting upgrading for no additional fee. During the grant-funded period, Table Rock schools will pay a fee to convert from an Alexandria system to the Follett system, and will not incur any fees this first year. Humboldt Schools and the Bruun Memorial Public Library will each pay a \$240 fee for support of the Catalog Plus software, and another \$240 fee to support the Circulation Plus software. These support fees are expected to be ongoing costs, absorbed by each entity beyond year one.

Impact the project will have on the customers, clients, and citizens. What services or processes will be changed or implemented, with respect to customer service, productivity, quality, or performance:

This impact is the general thrust of the project--to upgrade services and accessibility with technology for the benefit of our customers--the patrons and students of the TRIO project's libraries. Currently, limited opportunity exists when a user wants to know what materials are available at each library, due to inadequate software licensing, scarcity of hardware, and no viable online solution. Essentially, the current situation requires patrons to physically come to the library to conduct a search, and a search may only be done for that specific library's holdings. With the TRIO project, a new era of customer service will be implemented--as access points will expand to any of the computers in the libraries or school classrooms, from computers at home, or virtually anywhere around the world.

Performance and quality of library service should also improve as technology upgrades in hardware and software will make current tasks more seamless and speedy.

Impact the new system will have on current problems and how it will impact the entity's policies, procedures, standards, staffing, costs, and funding;

Current problems in access will be assisted through this enhancement project. Necessarily, certain policies and procedures will need to be reviewed as new and better technology is put in place.

In the schools about to be unified, consensus on methods of library cataloging, procedures for reserving books, and circulation times, and fines will likely need to be developed

The consortium might also need to consider ways in which they can assist each other in developing public awareness and publicity, and even consider standardizing the design of the linking web page to increase user-friendliness and transference.

Other solutions that were evaluated and why they were rejected. Include their strengths and weaknesses. Explain the implications of doing nothing and why this option is not acceptable:

Automation of libraries is an ongoing process; new books are purchased by each library, and others are eliminated on an intermittent basis. Funding and support from constituents and taxpayers, as well as from the end-users, has already been established by the current library automation process at each site. Volunteer assistance has helped particularly at the Bruun Memorial Public Library. To do nothing would severely undermine present efforts and future possibilities. The three libraries have considered independent projects for automation improvement, as there is synergy from the close proximity and natural coherence of the three libraries to work together, the idea of separate improvement projects was rejected.

The Design Concept for this project began as a vision from larger urban libraries' examples of posting library holdings to the web. Opportunity of using Follett's Web Collection Plus and installation of a point to point line that connected just the HPS and the City Library was researched. The focus changed from only the two buildings to include Table Rock schools as well, linking all to web access.

The Design Concepts considered included:

:Wireless link back to the HPS hub to the WWW: **Rejected** because of cost and cumbersome dealings for a needed remote tower between HPS & TR-S School (concern for reliability in Nebraska weather, and minimum costs presented for installation of a used wireless system was quoted at approximately \$25,000 caused us to disregard this option)

: Three separate servers all connected immediately to the Web: Rejected because of the extremely high ongoing/ life cycle cost to sustain such connections to the web. We have met the digital divide and it has a significant yearly price tag (minimum amount for this to happen would be \$19,000 the first year, with most of this being annual recurring cost).

:T-1 Point to point from the City Library to the HPS Galaxy Cable port to the web cloud, and Point to Point from the TR-S school to the HPS Galaxy Cable port to the web cloud via ESU 6 in Milford: Even this compromise Concept had to be **Rejected** because of the costs beyond year one were too much to be able small libraries to absorb in their restricted budgets (minimum amount for this to happen would be \$16,000 the first year, with most of this being annual recurring cost).

: Doing Nothing: was given serious consideration in hopes that advancing technology (especially on the connectivity side of the balance sheet) would bring the life cycle costs down to a workable level in a couple of years. This was **Rejected** as the project team recognizes that the window of opportunity to impact these students is short. Waiting for incremental technology improvements prior to doing anything would be writing off whole segments/ would be losing the window of opportunity to make an impact in these student's education.

The project's compliance with any state or federal mandates. If yes, please specify the mandate being addressed:

The schools and libraries will be in compliance with federal Internet filtering mandates.

Section VI: Implementation

Describe the implementation plan--from design through installation and ongoing support--for the project. The narrative should address the following:

1. Project sponsor(s) and stockholder acceptance analysis;

The primary stakeholders in this consortium project are the Bruun Memorial Public Library of Humboldt, Humboldt Public School Library-Media Center, and Table Rock-Steinauer School Library-Media Center otherwise known as the consortium, Taking Resources & Information Online (TRIO).

Representatives of these libraries have been seeking ways to collaborate for a number of years. The result of this interest has led to the formation of a consortium to seek pathways for library improvements. Numerous meetings, conversations, conference calls, and emails have established stockholder acceptance.

See also letters of commitment in appendix for verification of stockholder acceptance.

2. Define the roles, responsibilities, and required experience of the project team;

A trio of librarians represent the key participants of the Taking Resources & Information Online (TRIO) project team. They are: Ms. Harriet Deacon, Media Specialist-Librarian at Table Rock-Steinauer Public Schools; Ms. Kay Coleman, Media Specialist-Librarian at Humboldt Public Schools; and Ms. Jorene Herr, Librarian at the Bruun Memorial Public Library in Humboldt. All three librarians have been involved in past library automation projects at their respective sites. They will oversee the implementation of this enhancement at their respective libraries, and coordinate consortium activities.

Adjunct members of the TRIO project include: Humboldt Public School Technology Support Coordinator, Joan Drier; Table Rock-Steinauer Public School Technology Support Coordinator, Cindy Stander; Unified District Superintendent, Mr. Clinton Kimbrough; Southeast Nebraska Development District Planner, Mr. Kevin Burnison, and Technology Consultant from Computer Wizardry, Mr. Troy Veltrop. Mr. Mike Goff, Director of Network Services for Southeast Nebraska Educational Service Units 4, 5, & 6 will be the IT manager for the schools involved in this project. Mr. Goff has many years experience with network configurations and is well acquainted with the needs and constraints of each district, and familiar with the staff of the schools. Mr. Mark McMahon, ESU 4 Technology Consultant will also serve as a resource. Mr. Veltrop, technician, will work on technology support for all three entities, with direction from Mr. Goff and Mr. McMahon, in the case of the schools.

Additional input from such organizations as the Friends of the Library, the Table Rock and Humboldt Technology Committees, the Public Library Board, and the City Council of Humboldt will be encouraged.

3. List the major milestones and deliverables for each milestone;

See activity grid in appendix.

4. Training and staff development requirements and procedures;

The training for the key librarians will be minimal as all have previous experience with products of the proprietary automation vendor. All training for school faculty in using the new system will be the responsibility of library staff. Training sessions will take place in the respective libraries formally, and informally, as needs become apparent.

Training for the student users will be designed by the school librarians with consultation from classroom teachers, the building administrators, and ESU#4 curriculum specialists. While comprehensive plans to increase information literacy across all grade levels is needed, the requirements for learning the interface for the local district catalog system, as well as the interface for the LibraryCom Internet solution will again be very minimal. It is expected that classroom and subject area teachers will share the responsibilities for training students on these interfaces with the two school librarians.

Many options for student and patron training exist with coordination among the entities and their supportive organizations. It is highly likely that project-developed activities will include intergenerational connections between school and citizens during the training phases. For example, the eighth grade Quest class at Humboldt each year undertakes a community service project; librarians and teachers could use a train the trainer model to initiate these students as volunteer trainers for local community users on the cataloging interface.

Students involved in technology classes might also assist by creating web pages which frame the information and links developed through the librarians of the TRIO project; journalism students might serve as a resource for design of awareness materials and writing of articles for local and school newsletters.

Additionally, the school sites themselves, with their laboratories of computers, could serve as convenient facilities for training in library catalog searchers for larger groups of citizens.

5. Maintenance and on-going support requirements, plans, and provisions.

Mr. Mike Goff, Director of Network Services for Southeast Nebraska Educational Service Units 4, 5, & 6 will be the IT manager for the schools involved in this project. Mr. Goff has many years experience with network configurations and is well acquainted with the needs and constraints of each district, and familiar with the staff of the schools. Mr. Mark McMahon, ESU#4 Technology Consultant will also serve as a resource. Mr. Veltrop, technician, will work on technology support for all three entities, with direction from Mr. Goff and Mr. McMahon, in the case of the schools.

Section VII: Technical Impact

Describe how the project enhances, changes or replaces present technology systems, or if new systems are being added. The narrative should address the following:

This project will replace two aging DOS-based automation systems with Windows based solutions. One Macintosh automation system will be converted over to a Windows based product that matches the other two members of the consortium. Windows NT servers will be purchased for all three sites to ensure proper performance of these software solutions.

1. Describe the hardware, software, and communications requirements for this project. Describe the strength and weaknesses of the proposed solution;

Individual Sites will each acquire hardware and software:

Data server/Web Servers: Pentium III 933MHz Server; 15" Monitor; Genuine Intel Motherboard w/integrated video and LAN Genuine Intel 933MHz Processor w/133MHz FSB; 128MB PC-133 SDRAM; Dual 18GB Ultra160 SCSI 7200rpm Hard drives (mirrored); Adaptec 39160 Ultra 160 SCSI Controller; Windows NT software; 40X SCSI CD-ROM; 24X/8X/8X SCSI CDRW w/ Adaptec Software; 20GB Travan TR5 SCSI Tape Backup w/cartridge; 3.5" 1.44MB Floppy Drive; PS-2 Keyboard; PS-2 Mouse; Mouse Pad; Performance Workstation Tower w/300W Power Supply; Smart-UPS NET420 420VA - Full 4-Outlets

For Follett information, please refer to appendix and current/TRIO charts and spreadsheet delineation of financial aspects of the TRIO project. **Please also see the attached hard copy fax of cost proposal and terms from Follett.**

The Humboldt libraries have chosen to migrate from a DOS environment to a Windows environment, as per the recommendation of the automation vendor. Graphical interfaces are familiar to the great majority of our patrons, and are easily taught to beginning learners. Additionally, the proprietary automation vendor now has icon-based options and support for computer touch screen displays in its catalog software; these are accommodations especially suitable for special needs/younger students.

The operating system of choice is Windows NT, a reliable, expandable and easily upgraded architecture. Windows NT allows for system management to be conducted from the central site and "ported" to other remote workstations. System administration could feasibly be maintained from one site for all member libraries.

Reliability and speed of the Internet connections is a concern over which we have little control. Maintenance and support of the LibraryCom site is also beyond our control. The Internet has become the interface of choice for people around the world, and temporary connection problems is a risk of the modern information society.

2. Rationale for determining the selection and appropriateness of the proposed technology components compared to the needs of the users;

Windows NT has become a standard for operating software, and vendors have developed their automation products to run on NT. The library automation vendor of choice has developed a Windows-only product for web publishing of card catalogs. Since we envision using that module in future years, it seems wise to have appropriate servers in place. The end-user continues to be the primary concern in these choices.

3. Issues pertaining to reliability, security and scalability (future needs for growth or adaptation);

The Windows NT servers will have features to ensure upgradability and reliability. They are the accepted standard for networking solutions around the world. Software upgrades will

allow for future growth. Fireball software, backup systems, and UPS surge protectors will be installed on the servers to protect the equipment and data.

4. Appropriateness of the key technologies with respect to generally accepted industry standards.

Windows NT has become a standard for operating software, and vendors have developed their library automation products to run on NT. We believe all technologies chosen to install in the buildings will be appropriate.

5. Compatibility with existing institutional and/or statewide infrastructure:

Humboldt School has a Windows NT network in place, and the library just needs to upgrade to a multi-user license and an improved server for the library automation systems. Table Rock-Steinauer school will install a Windows NT server, and Mr. Goff will assist with using it with the Macintosh workstations throughout the building.

Section VIII: Risk Assessment

Describe possible barriers and risks with implementing the project. The Narrative should address the following:

1. Describe the risk assessment which has been performed on this project;

"There are no mistakes; a mistake is simply something you do that produces a result you weren't after, perhaps even opening a door you didn't know existed."

Antonia (Toni) Stone, Founder, CTCNet

This project has been analyzed to forecast what areas of potential failure exist, and how the failure of that component of the project would affect the overall success of the project. This assessment was directed by Kevin Burnison of the Southeast Nebraska Development District and was conducted across a wide cross section of expertise. Conversations and pertinent data from among the following sources served to verify the risks:

- The Nebraska Library Commission
- Educational Service Unit Administrators and Technical Specialists
- Southeast Nebraska Distance Education Personnel
- Economic Development contacts
- State Department of Education personnel
- Alltel engineers and Internet consultants
- Various library automation vendors
- Technology service consultants
- Public Library Friends members
- City of Humboldt officials
- Librarians from other sites who have been involved in similar access enhancements
- Telecommunications Infrastructure Needs Assessment Inventory
- Local school district administrators, technology support teachers, technology committee members, and school library-media specialists
- Local school board members

2. List the identified risks, and relative importance of each;

- a) Hardware failure or malfunction-High importance; Medium Concern.
 - b) Library automation software problems-High importance; Minor concern.
 - c) Coordination of key participants of the consortium-Medium importance; Low Concern.
 - d) Connectivity-Medium importance; Medium concern.
 - e) Training-High Importance; Minor concern.
- (Please see also the next section, #3)

3. Identify strategies which have been developed to minimize risks;

- a) Hardware failure or malfunction-High importance; Medium Concern. Project objectives cannot be achieved with non-functioning equipment. Equipment will be installed that ensures backup of data, surge protection and firewall security. To insure rapid response to remedy equipment failures for the school entities of the consortium, either school's technology support teachers will be used to pinpoint necessity in calling for assistance from ESU, automation vendors, or other technical service providers. These staff have several periods of their teaching schedule for such assistance. Bruun Memorial Library's own librarian will troubleshoot difficulties, with possibilities of assistance and support from the school librarians. Technical service providers will be called if deemed necessary.
- b) Library automation software problems-High importance; Minor concern. Each librarian is already experienced with the software. The proprietary vendor has available a technical support package that each entity will be using.
- c) Coordination of key participants of the consortium-Medium importance; Low Concern. We believe that the caliber of enthusiasm the librarians exhibit for the TRIO project will provide success. The school unification initiative and the close proximity of the libraries, along with such communications options as email, will enable easy collaboration for the key participants.
- d) Connectivity-Medium importance; Medium concern. Lack of state-of-the-art and reasonably priced telecommunications options as originally envisioned by the consortium for these rural sites has been addressed through an alternative solution--web catalog hosting by an outside resource. While not the perfect remedy, it is the most likely choice to continue the thrust and collaboration of the project, in hopes that changes in pricing structure and availability of telecommunications will provide a better remedy for the future.
- e) Training-High Importance; Minor concern. The commitment to conduct these activities is a high priority of the district policymakers, administration, and teachers, as well as the public library stakeholders. State standards that mirror the project objectives present compelling interest in this activity. Schools and libraries are the key community venues for teaching and learning; the training requirements of this project will be adequately addressed by the expertise of the key participants and those who assist them.

4. Impact if project is not completed as proposed.

Conceivably, the impact of not delivering our goals and objectives as stated would be a lack of confidence in future initiatives, by either the key participants or the public in general. The

future vision of continuing efforts to host our own web catalogs would be met less enthusiastically.

The expectations of the students, parents, and patrons in our communities is toward more growth technologically. We feel that the collaboration and safeguards planned into the grant will ensure success and that our project will act as a model of innovation for other entities.

Section IX: Financial Analysis and Budget (Required)

1. Please include estimated number of hours or full-time equivalent (FTE) by position. Include separate totals for salary and fringe benefits. If it is necessary to itemize on a separate sheet, include only the subtotal in this table.

For this project, we are not charging staff time to the cost of the project.

2. Please itemize other contractual expenses on separate sheet.

See Financial Analysis Table

3. Please itemize capital expenditures by categories (hardware, software, network, and other) on a separate sheet.

See Financial Analysis Table

4. Please itemize other operating expenses on a separate sheet.

See Financial Analysis Table

5. Please indicate the source of any cash match.

The Friends of the Bruun Memorial Library will be responsible for a cash match of \$1000 for the Bruun Memorial Public Library's share of the required match. The Humboldt Public School Foundation will be responsible for a cash match of \$1000 in support of the Humboldt Public Schools. The Community Foundation of Humboldt will give a cash match of \$1000 in support of the TRIO project.

Please refer to the hard copy letters of commitment from these organizations.

6. Please indicate the source of any in-kind match and how it will be documented.

The Humboldt Public Schools has agreed to fund some of the required library automation software from the Follett Company for the Humboldt Building. They will have purchase orders and invoices available.

Please refer to the hard copy letter of commitment from Humboldt Public Schools

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7. Please provide a breakdown of any other external funding sources. Sources of external funds may include grants from federal agencies or private foundations.

Members of the consortium may write grant applications to the Nebraska Library Commission for Library Services and Technology Act funds. Additional sources of funding will be considered as opportunities arise. Other than local funds, no other external funds have been secured at this time.

Activity	M1	M2	M3	M4	M5	M6	M7	M8	M9	M10	M11	M12
Award of grant; Initial consortium meetings	X											
Development of attainment charts; Training plans	X											
Design pre- and post-assessment instruments	X											
Purchase and install Hardware	X	X										
Purchase and install Software	X	X										
Librarians train on Software		X										
Conduct consortium communication and/or meetings	X	X	X	X	X	X	X	X	X	X	X	X
Transference of current files to new formats		X	X	X								
Finalization of training plans for other staff/students/citizens		X	X									
Implement staff training			X	X								
Administer pre-implementation survey to selected grade levels				X	X							
Review formative data and make adjustments				X				X				
Initiate awareness campaign for web catalog site/public training					X	X	X					
Provide training to students/public					X	X	X	X	X	X	X	X
File six month report						X						
Analyze all data and assessments for future planning									X	X		

Complete grant activities; File final report													X
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CURRENT	Humboldt Public Library	Humboldt School Library-Media Center	Table Rock Steinauer School Library-Media Center
Automation Vendor	Follett	Follett	Alexandria
Operating System	DOS	DOS	Macintosh
Automation License	Multi-User	Single-User	5-User
Catalog Search Stations Available	One	One	Five
Specs on Current Server Used for Library Automation	133 MHz Pentium with 8x CD-ROM, 32 MB RAM, 1.2 GB Hard Drive, no modem	100 MHz Pentium II 48 MB RAM 7.85 GB Hard Drive	PowerMac G3 with CD-ROM, 4 GB Hard Drive, 64 MB RAM, OS 9.0.1 Operating System
Solution to allow online catalog searches	None	None	None
Connectivity Issues	Single dial-up line currently used for Internet	Has 10 meg (soon to be 100 meg) availability due to distance education laboratory	Has 56 Kbps direct connect Internet through ESU

With Project TRIO	Humboldt Public Library	Humboldt School Library-Media Center	Table Rock Steinauer School Library-Media Center
Automation Vendor	Follett	Follett	Follett
Operating System	Windows	Windows	Windows
Automation License	Multi-User	Multi-User	Multi-User
Catalog Search Stations Available	Two (2)	Ninety (90)	Forty (40)
Specs on Server To Be Installed for the TRIO Project	Pentium III 933 Mhz; 128 Mb; Dual 18Ghard drives; 40X CD ROM	Pentium III 933 Mhz; 128 Mb; Dual 18Ghard drives; 40X CD ROM	Pentium III 933 Mhz; 128 Mb; Dual 18Ghard drives; 40X CD ROM
Solution to allow online catalog searches	Enter agreement with Library Commission to serve as web host to extend catalog search capability	Enter agreement with Library Commission to serve as web host to extend catalog search capability	Enter agreement with Library Commission to serve as web host to extend catalog search capability
Connectivity Issues	Search for funding to help offset costs of connectivity needed to implement own web hosting for library	Search for funding to help offset costs of connectivity needed to implement own web hosting for library	Search for funding to help offset costs of connectivity needed to implement own web hosting for library

Section IX: Financial Analysis and Budget (Required)

Provide the following financial information
nearest \$100

Rounded here to the

Project TRIO - Humboldt Publi Library & H/TR-S = Humboldt Attendance Center & Table Rock Attendance Center	CTF Grant Funding	Cash Match (5)	In-Kind Match (6)	Other Funding Sources (7)	Total
Personnel (1)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Contractual Services					
● Design	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
● Programming and Testing	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
● Project management evaluation, and quality assurance	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
● Other (2) LibraryCom & Follette & Troy Veltrop	\$3,000	\$2,600	\$0.00	\$3,000	\$8,600
Capital Expenditures (3)					
● Hardware Acquisition Follette Scanner & Troy Veltrop dba Computer Wizardry Servers	\$13,200	\$0.00	\$0.00	\$0.00	\$13,200
● Software Acquisition	\$2,400	\$0.00	\$0.00	\$0.00	\$2,400
● Network Costs	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
● Other					
Other Costs					
Telecommunications					
Supplies and materials					
Other operating (4)					
Travel					
TOTAL	\$18,600	\$2,600	\$0.00	\$3,000	\$24,200

76.9%

10.7%

12.4%

100%

$\$2,600 + \$3,000 = \$5,600 = 23.1\%$

\$1,000 each from Friends of the Library/ Humboldt School Foundation/ Humboldt Community Foundation.
\$2,600 from H/TR-S ... Humboldt Public School general fund.

Item	Humboldt School	Humboldt Public Library	TRS	Project Totals
Follett scanner	0	0	499	
Follett conversion fee	0	0	699	
Follett single user-to network licenseupgrade	1470	0	0	
Circulation Plus Tech Support	240	240	0	
Catalog Plus Tech Support	240	240	0	
DOS to Windows upgrade	1160	0	0	
Special Price conversion (Catalog/Circ/Faircom)	0	0	1160	
Alliance Plus	0	0	0	
Totals for Follett software	3110	480	2358	5948
Server w software, back up system, and UPS surge protector	4222.5	4222.5	4222.5	
Tech Support for servers (\$100 mo/12 mos)	960	960	960	
Total Hardware and support	5182.5	5182.5	5182.5	15547.5
LibraryCom-web hosting fee/support for 12 mos.	900	900	900	2700
Total for web accessibility to patrons	900	900	900	2700
Cost of implementation	9192.5	6562.5	8440.5	24195.5
Cash match-Friends		1000		1000
Cash match School Found	1000			1000
Cash match Community			1000	1000
Humboldt School inkind match of software(multi user of 1470 and Windows upgrade-1160)	2630			2630
Total matches				5630
Grant Funds Requested				18565.5
Years 2+ Ongoing				
yr 2+ Web Collection tech support	180	180	180	
yr 2+ Catalog/Circulation Plus Tech Support	480	480	480	
yr 2+Alliance Plus Online	249	249	249	
Follett Support	909	909	909	
Technician (\$80 mo X12)	960	960	960	
Ongoing Connectivity (yrs 2+)				
Estimated Ongoing costs (per yr)	1869	1869	1869	5607

